

CLAIMS

1. An elongate container for the transport of bulk powders, the bottom of the container being provided with a longitudinally sloping membrane support extending
5 along at least a portion of the length of the container, a gas-permeable membrane mounted on said support, said support being unsupported relative to the container between its longitudinal and transverse ends.
2. A container according to Claim 1, wherein the membrane is curved in a
10 direction transverse to the length of the container, the extent of curvature changing along the length of the membrane.
3. A container according to Claim 2, wherein the curvature of the membrane increases in a direction from its lowest point to its highest point.
- 15 4. A container according to any of the preceding claims, wherein a plurality of membranes are arranged along the base of the container in lengthwise juxtaposition
5. A container according to Claim 4, wherein adjacent membranes slope in
20 opposite directions along the length of the container.
6. A container according to any of the preceding claims, wherein a container, at least when arranged for unloading of bulk powder therefrom, is provided with a discharge pipe, one end of which is located adjacent the lowest point of the or each
25 membrane.
7. A container according to Claim 6, wherein the discharge pipe is connected to means, located outside the container, for pneumatically conveying powder from the container to a position exterior thereof.

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8. A container according to any of the preceding claims, wherein the or each membrane is inclined at an angle of from 10° to 15° relative to the bottom of the container.
- 5 9. A container according to any of the preceding claims, wherein means are provided, at least when the container is to be unloaded, to cause powder located above the membrane to be fluidised.
- 10 10. A container according to Claim 9, wherein the fluidising means includes means for delivering gas under pressure to the space below the sloping membrane.
11. A container according to any of the preceding claims, wherein the membrane support is in the form of a foraminous curved plate.
- 15 12. A container according to any of the preceding claims, wherein the membrane is made of woven fabric, porous metal sheet or porous plastic sheet.
13. A container according to any of the preceding claims, wherein the container is cylindrical.
- 20 14. A container according to Claim 13, wherein the container is a pressure vessel located within a standard ISO Tank Container dimensioned frame.
15. A method of conveying bulk powder to a destination therefor including the steps of:
- 25 loading the bulk powder into a container as claimed in any of the previous claims;
transporting the container to a location in the vicinity of said destination;

feeding gas under pressure to a position between the membrane and the bottom of the container so as to fluidise the bulk powder within the container; and

5 pneumatically conveying said fluidised bulk powder from the container to said destination.

16. A method according to Claim 15, wherein, during the loading of the bulk powder into the container, air is extracted therefrom.

10 17. A method according to Claim 16, wherein air is extracted from below the membrane, thereby drawing entrapped air from the powder and through the membrane to increase the bulk density of the powder.

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